

REMARKS

Claims 1-44 are pending. By this Amendment, claims 1, 12 and 44 are amended to correct a typographical error.

The November 29, 2006 personal interview is made of record. Applicant gratefully acknowledges the courtesies extended by Examiner Drodge to Applicant's representatives Messrs. Sullivan and Hunt during the interview. The substance of discussions during the interview are incorporated into the following remarks.

Item 1 of the Office Action rejects claims 1-4, 7, 12-14, 17 and 22-44 under 35 U.S.C. 103 over U.S. Patent 5,325,765 to Sylvan in view of WO 91/14389 to Frise. Item 2 of the Office Action rejects claims 3, 5, 6, 9-11, 15, 16, 19-21 and 32 under 35 U.S.C. 103 over Sylvan in view of Frise and U.S. Patent 3,971,305 to Daswick. Item 3 of the Office Action rejects claims 8 and 18 under 35 U.S.C. 103 over Sylvan in view of Frise and U.S. Patent 3,389,650 to Michielsen. These rejections are respectfully traversed.

The disclosures of Frise and Sylvan were discussed during the interview, and specific sections of each of the references were identified by the Applicant's representatives. The Examiner requested that Applicant identify these sections again in this Amendment, and therefore, summaries of the sections identified and discussed are provided below.

As was discussed during the interview, Frise discloses a reusable coffee filter with fluted sides and a flat bottom that are arranged so that the filter may be used with differently sized and shaped coffee filter baskets. (Frise page 3, lines 20-29) The flexibility and resiliency of the fluted filter sidewalls allows the filter to conform closely to the filter basket so that the filter "moulds itself to the full shape of the supporting brewing funnel basket, taking full advantage of each manufactureres [sic] drip head plurality arrangement for hot water flow." (Frise page 3, lines 12-15 and page 4, lines 15-19) The filter also is made rigid at its upper peripheral edge to aid in maintaining the filter's shape and help prevent collapse of the filter. (Frise page 3, lines 2-7 and

lines 45-49) The filter is arranged to support proper operation in a drip-type coffee maker that relies on gravity to draw water through the grounds and primarily out through the bottom wall of the filter. (Frise sentence bridging pages 2 and 3). Frise mentions that reduced coffee granule surface results in water flow through the filter side wall, thereby reducing effective brewing and filtration of coffee granules. (Frise page 3, lines 15-20). Thus, Frise discloses that excessive flow through the sidewall results in ineffective brewing.

In contrast to Frise, Sylvan describes a disposable beverage filter cartridge that receives pressurized water to form a beverage, such as coffee. (Sylvan col. 1, lines 46-49 and col. 4, lines 16-27) A filter 16 is attached at its upper edge 24 near the top opening 17 of a base 12. (Sylvan col. 3, lines 54-57) Sylvan makes it clear that the filter 16 should not contact the base sidewalls (other than where the filter is attached to the base) so that water can flow freely through the entire filter surface. (Sylvan col. 1, lines 50-53 and col. 3, lines 22-26) The filter 16 is also spaced from the bottom of the base to avoid piercing of the filter during use. (Sylvan col. 3, lines 26-29 and col. 4, lines 4-6)

As was discussed during the interview, there are several reasons why one of skill in the art would not have been motivated to employ a fluted filter element in the Sylvan device as asserted in the Office Action and/or would not have had a reasonable expectation of success in making the asserted modification. The last sentence of page 3 of the Office Action states that it would have been obvious to one of skill in the art to use a pleated filter in the Sylvan cartridge to increase the filter surface area. However, one of skill in the art would not have been motivated to make such a modification of the Sylvan cartridge for the reason stated in the Office Action. Neither Frise nor Sylvan teach or suggest that increased filter surface area is desirable or provides a better filtering result. While increased filter surface area may be desirable in some filtration applications, such as drinking water filtration, this is not necessarily the case with beverage production using a cartridge like that in Sylvan. As a practical matter, simply increasing filter surface area in the Sylvan cartridge does not necessarily improve the cartridge's ability to make a suitable beverage. As discussed during the interview, Sylvan teaches that the flow of the beverage occurs through the

entire filter surface during hot water injection. Thus, increasing the filter surface area in the Sylvan cartridge provides an increased area for brew water to pass through the filter without contacting or otherwise properly infusing with the coffee grounds. The result, then, of simply increasing filter area is likely to be reduced contact time between the brew water and coffee grounds, providing a coffee beverage with less dissolved solids and other materials that the water picks up during the infusion process. As discussed in the "Background" section of this application, reduction in dissolved solids is generally undesirable when brewing coffee. Thus, increasing filter surface area in the Sylvan device would likely result in lower quality coffee, and therefore would not provide motivation to make the asserted modification.

Other reasons why one of skill in the art would not have been motivated to make the asserted modification of the Sylvan cartridge were also discussed during the interview. For example, Frise teaches that the flutes of the filter element allow the filter to closely conform, or "mould itself to," the filter support basket. However, Sylvan is explicit that the filter element should not contact the base or outer container so that flow through the filter is unobstructed. Thus, one of skill in the art would have viewed flutes in a filter element as disclosed by Frise to be unacceptable for use in the Sylvan cartridge because the flutes would undesirably allow the filter element to contact and conform to the cartridge walls. (In this regard, Applicant notes that independent claims 12 and 44 recite that at least a portion of the filter sidewall is spaced inwardly from and out of contact with the container sidewall, in direct contrast to the teaching of Frise regarding the advantage of a fluted filter sidewall.)

Another reason discussed as to why the asserted modification would not have been made is that the filter element disclosed by Frise is reusable. Frise teaches that the filter can be used again and again in different brewers by simply washing the filter between uses. In contrast, the Sylvan cartridge is disposable, and is intended to be discarded after a single use. Applicant asserts that one of skill in the art would not have been motivated to use a reusable filter element design in a disposable filter cartridge because to do so would not take advantage of the reusable characteristics of the filter.

Also, the Frise filter includes a rigid peripheral edge at its top, e.g., to help the filter element maintain its shape. One of skill in the art would not have been motivated to use such a filter in the Sylvan cartridge because it would be difficult (if not impossible) to suitably secure the filter at its top edge to the interior wall of the Sylvan cartridge. The rigid top edge of the Frise filter would not be amenable to the heat, ultrasonic or microwave securing techniques used in Sylvan to attach the filter to the base, and would not allow the filter to create a proper seal between the filter and base. For example, the rigid top edge of the Frise filter would likely result in periodic gaps being present between the filter and the cartridge base at the filter's top edge. These gaps would likely allow the brew water to bypass the coffee grounds and filter, traveling directly from the inlet needle to the lower output compartment of the cartridge.

Finally, Frise discloses that the fluted filter is designed to operate while supported on all sides, including the bottom, by the filter basket. However, Sylvan is clear that the filter element must be spaced from the sidewalls and from the bottom of the cartridge base so that the filter element is not pierced by the beverage outlet needle. Nothing in Frise suggests that the fluted filter element could work properly while not supported at the bottom, and instead suspended from its top edge, as is the case with the filter element in the Sylvan cartridge. Would the fluted filter element sag undesirably when subjected to the higher water pressure introduced into the Sylvan cartridge during brewing? Would the filter element fail under such conditions, e.g., rip or tear due to the water pressure? Would the filter element sidewalls contact the cartridge sidewalls (which Sylvan indicates should not happen)? None of these questions are answered by Frise or Sylvan, much less do the references provide a motivation to make the asserted combination.

In summary, the teachings in the art regarding the use of fluted filters in drip-type (or gravity-type) brewers do not necessarily inform one of skill in the art as to how a filter should be arranged in a brew cartridge used in a pressure-type brewing system that injects pressurized hot water into the cartridge, like that in Sylvan. To conclude that the known use of fluted filters in drip-type brewing renders the asserted modification of the Sylvan cartridge obvious is to impermissibly

use hindsight reasoning that picks and chooses features from the art, and assembles them in a way not taught or suggested outside of this application. For example, both pressure-type brew cartridges and fluted filters in drip-type brewing have been known for some time (both Sylvan and Frise were filed over 13 years ago). However, Applicant is unaware of any reference that describes the use of a pleated or fluted filter in a cartridge like that in Sylvan.

In view of the above amendment, applicant believes the pending application is in condition for allowance. Favorable consideration of claims 1-44 is requested.

Should the Examiner believe that anything further is desirable to place the application in better condition for allowance, the Examiner is invited to contact the Applicant's undersigned representative at the telephone number below.

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Respectfully submitted,

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